US Army Corps
of Engineers

Peer Review Plan

Mill Creek, Kentucky
Interim Feasibility Study

April 2007

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Introduction

The Mill Creek basin lies entirely in Jefferson County, Kentucky, and has a drainage area of approximately 34 square-miles at its juncture with the Ohio River. Less than 10% of this drainage area lies within the boundaries of the former City of Louisville corporate limits, but the entire area lies within the limits of the new Metro Louisville corporate boundaries. The study area lies in the southwest portion of Jefferson County, Kentucky, and is protected from flooding from the Ohio River by the Southwest Jefferson County Flood Protection system (primarily consisting of a long levee along the Ohio River). This system was completed in the 1980's. However, this existing Ohio River flood levee system does not protect the Mill Creek basin from interior flooding (due to local storms which exceed flow capacities of the above-listed stream reaches). Sometime prior to 1950, the natural 34 square mile basin was effectively cut nearly in half with the construction (by local government agencies) of the Mill Creek Cut-off. The Mill Creek Cut-off provides a shortcut channel for drainage from the upper portions of Mill Creek to flow directly into the Ohio River, thereby reducing water flows in the "lower" Mill Creek (i.e., the Mill Creek generally south of Lower Hunters Trace).

The Sponsor has indicated a preference for concentrating at this time only in the "upper" Mill Creek – now a complete hydrologic basin in itself, with a drainage area of approximately 19 square miles. The previous 905b Analysis focused only on this area. The upper Mill Creek flows towards the west from its origin (in the Hazelwood Ave. area of Louisville) until it intersects the Ohio River at about Ohio River Mile 616.5. (via the Mill Creek Cut-off). The upper Mill Creek basin (watershed) includes several sub-reaches and major tributaries, including:

- Mill Creek Cutoff
- Big Run Diversion
- Cane Run Ditch
- Boxwood Ditch
- East Branch Boxwood Ditch
- Lynnview Ditch
- Heatherfield Ditch
- City Park Ditch
- Big Run Creek

All of these tributary areas will be considered in the feasibility study.

Authority for the Mill Creek, Kentucky, Interim Feasibility Study is contained in a resolution adopted on 5 May 1987 by the Committee on Environment and Public Works of the United States Senate. This resolution reads as follows:

"RESOLVED BY THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS OF THE UNITED STATES SENATE, *that the Board of Engineers for Rivers and Harbors, created under Section 3 of the Rivers and Harbors Act, approved June 12, 1902, be, and is hereby requested to review the report of the Chief of Engineers of the comprehensive flood control plan for the Ohio and lower Mississippi Rivers, published as Flood Control Committee Document Numbered 1, 75th Congress, and other pertinent reports, with a view to determining the advisability of providing additional improvements for flood control and allied purposes in the Metropolitan region of Louisville, Kentucky, with particular reference to existing and potential flooding problems in the Pond Creek, Mill Creek, Beargrass Creek, and Floyds Fork drainage basins."*

The above authority provides the Corps broad authority to review water resources issues throughout the metropolitan Louisville area. As a result of this authority, the Corps has received various Congressional appropriations and begun (and/or already completed) work on several individual interim Feasibility studies, including:

- Pond Creek Interim Feasibility Study, completed in May 1996;
- Beargrass Creek Interim Feasibility Study, completed in 1997.
- Southwest Louisville Flood Damage Reduction Feasibility Study (focusing on drainage issues within the former City of Louisville city-limits, including the Churchill Downs area), still underway; and
- The Mill Creek Feasibility Study (this effort).

The Louisville and Jefferson County Metropolitan Sewer District (MSD) stated in a letter, dated 11 September 1997, that they were interested in cost sharing a feasibility study of the Mill Creek basin with the U.S. Army Corps of Engineers. The signatures by MSD and Corps' executives of the FCSA on August 2, 2005 initiated this most-recent feasibility study. This feasibility study will culminate in an interim report (focusing on the Mill Creek basin only) under the broad authority of the Metropolitan Region of Louisville study.

The peer review plan (PRP) presented below is a collaborative product of the project delivery team (PDT) and the USACE Flood Damage Reduction Planning Center of Expertise (FDRPCX). The FDRPCX shall manage the PRP, which for this study includes only an Independent Technical Review (ITR) and not an External Peer Review (EPR).

The Peer Review Plan

The following paragraphs correspond to paragraph 6.a. to 6.j. of Engineering Circular 1105-2-408.

a. The decision document shall be the *Western Lake Erie Basin Feasibility Study.* This report shall present measures to reduce flood damages in the Mill Creek, Kentucky, basin. To learn specifics of the plan, inquiries may be made to the following team members and designated points of contact from the responsible District and PCX:

Mill Creek Kentucky, Feasibility Study Project Manager
CELRL-PM-P
P.O. Box 59
Louisville, KY 40201-0059
Ph. (502) 315-6893 **Fax:** (502) 315-6893

Mill Creek Kentucky, Independent Technical Review Chairman
CELRN-PM-PF
P.O. 1070
Nashville, TN 37202
Ph. (615) 736-7192

Mill Creek Kentucky, Peer Review Manager
CELRL-PM-P
US Army Corps of Engineers, Louisville District
600 Martin Luther King Jr. Place
Room 173
Louisville, KY 40202
Ph: (502) 315-6891

b. The Mill Creek, Kentucky, Interim Feasibility Study shall identify needs and opportunities within the study area. It is not likely to create new influential scientific information or be a highly scientific assessment. The risk and magnitude of this project are NOT such that a critical examination by a qualified team outside of the Corps not involved in the day-to-day production of a technical product is necessary. At this time it is not anticipated that any request for project authorization from Congress would involve a project of a complex, controversial, or excessively costly nature. If in the future it would appear this report will identify costly, complex or controversial structural measures for implementation, the need for an EPR will be reconsidered. For this reason, the interim reevaluation report shall be subjected to only an ITR, and not an EPR.

c. Individual members of the ITR team shall review technical products as they are completed, submitting comments to the PDT, receiving responses, and resolving and certifying individual products, including the draft Mill Creek, Kentucky, Interim Feasibility Study report. This ITR review is planned for FY08, subject to availability of funds. Otherwise, ITR will be deferred until funds become available for the project.

d. As indicated in the paragraph "b" above, an EPR shall not be conducted on the Mill Creek, Kentucky, Interim Feasibility Study report.

e. During the development of the Mill Creek, Kentucky, Interim Feasibility Study report, the study team shall have an initial meeting with other Federal agencies, state agencies and interested stakeholders. Coordination will continue with MSD, the U.S. Fish and Wildlife Service, Kentucky agencies, and other interested parties throughout the course of the study process.

f. During the public review period of the draft Mill Creek, Kentucky, Interim Feasibility Study report, comments will be provided to the ITR team as available.

g. The ITR team is anticipated to be comprised of eleven technical experts.

h. The ITR team is comprised of individuals with experience in hydraulics and hydrology modeling, real estate, economics, engineering, NEPA/ecosystem restoration and an ITR Team leader with flood damage reduction plan formulation expertise.

i. As indicated in the paragraph “b” above, an EPR shall not be conducted on the Mill Creek, Kentucky, Interim Feasibility Study report.